



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
CINCINNATI, OHIO 45268

April 4, 2013

Ron Barnett – Owner
2233 East River Road
Moraine, Ohio 45439

Dear Mr. Barnett

Re: Summary of Results from 2012-2013 Vapor Intrusion Study
South Dayton Dump and Landfill Site – Buildings 26 and 27

The United States Environmental Protection Agency (EPA) prepared this letter to inform you of the results of the sub-slab (space under your building floor) and indoor air samples collected from your property in 2012 and 2013. Samples were collected as part of the vapor intrusion (VI) investigation at the South Dayton Dump and Landfill (SDDL) Site. Conestoga-Rovers & Associates (CRA) collected these samples to determine if solvent- or petroleum-related compounds (see Table 1) are present in soil vapor beneath the foundations and in the indoor air of your properties at concentrations which exceed sub-slab and/or indoor air VI screening levels, as established by the Ohio Department of Health (ODH).

VI is the migration of volatile chemicals from the subsurface into overlying buildings. VI is a potential concern at any building, existing or planned, located near soil, groundwater, or soil vapor containing solvent- or petroleum-related compounds that may volatilize or chemicals that are combustible.

The samples were collected by CRA and submitted to TestAmerica Inc. CRA received and validated the results of the laboratory analysis and submitted those results to the U.S. EPA.

The ODH has recommended the screening levels for sub-slab and indoor air samples. The screening levels represent concentrations of a substance that are unlikely to cause harmful (adverse) health effects in exposed people. Detections in indoor air below these levels are not of a health concern. A summary of the analytical results and comparisons to the ODH screening levels can be found in Table 1.

Compounds detected at concentrations greater than the ODH screening levels from sub-slab and indoor air samples are presented below. All of the air samples are measured in units called parts per billion by volume (ppbv). A map identifying each sample location within your buildings can be found in **Attachment A**.

TABLE 1
SUMMARY OF 2012 AND 2013 SAMPLING RESULTS
FOR
RON BARNETT RESIDENCE

Building / Probe	Sampling Date	Sample Type	Parameter	Concentration (ppbv)	ODH Screening Level (ppbv)
Building 26	1-3-12	Indoor Air	Benzene	0.21 / 0.27	0.4
Building 26	7-31-12	Indoor Air	Benzene	0.50 / 0.49 J	0.4
Building 26	1-9-12	Indoor Air	Benzene	0.048 U	0.4

Notes:

0.50 / 0.49 – Result / Duplicate Result

J – Estimated Quantity

U – Not Detected

What do these results mean?

Building 26 (2233 East River Road)

In July 2012, CRA collected two indoor air samples from the property. The sample results showed that all compounds were detected at concentrations less than the ODH screening levels for indoor air samples, except for benzene, which was observed in the two indoor air samples at concentrations of 0.50 and 0.49 ppbv. These two results exceed the ODH benzene indoor air screening level of 0.4 ppbv.

In January 2013, CRA collected an additional indoor air sample to verify if benzene is accumulating within the property. The sample result did not show benzene concentrations above the ODH benzene indoor air screening level. Due to this result, it was determined that benzene vapor intrusion is not occurring at the property.

Building 27 (2233 East River Road - garage)

CRA used a Landtec GEM2000 methane meter to monitor the sub-slab air for methane concentrations. No methane concentrations were detected in the sub-slab air.

Based on the laboratory results of the indoor air samples collected from Building 26 and the sub-slab air sampling using field instrumentation in Building 27, EPA and ODH conclude that at this time, there is no evidence of a potential public health threat posed by vapor intrusion in either of the two properties. At this time, no additional sampling will be required at your properties.

The U.S. EPA and ODH would like to take this opportunity to thank you for participating in this important investigation.

If you have health-related questions, please contact Dr. Bob Frey at the ODH at 614-466-1069. If you have questions related to the sampling or on-going site investigation, please visit our website at www.epaosc.org/southdaytonedumpsite or contact me at 513-569-7539.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve L. Renninger", with a long horizontal stroke extending to the right.

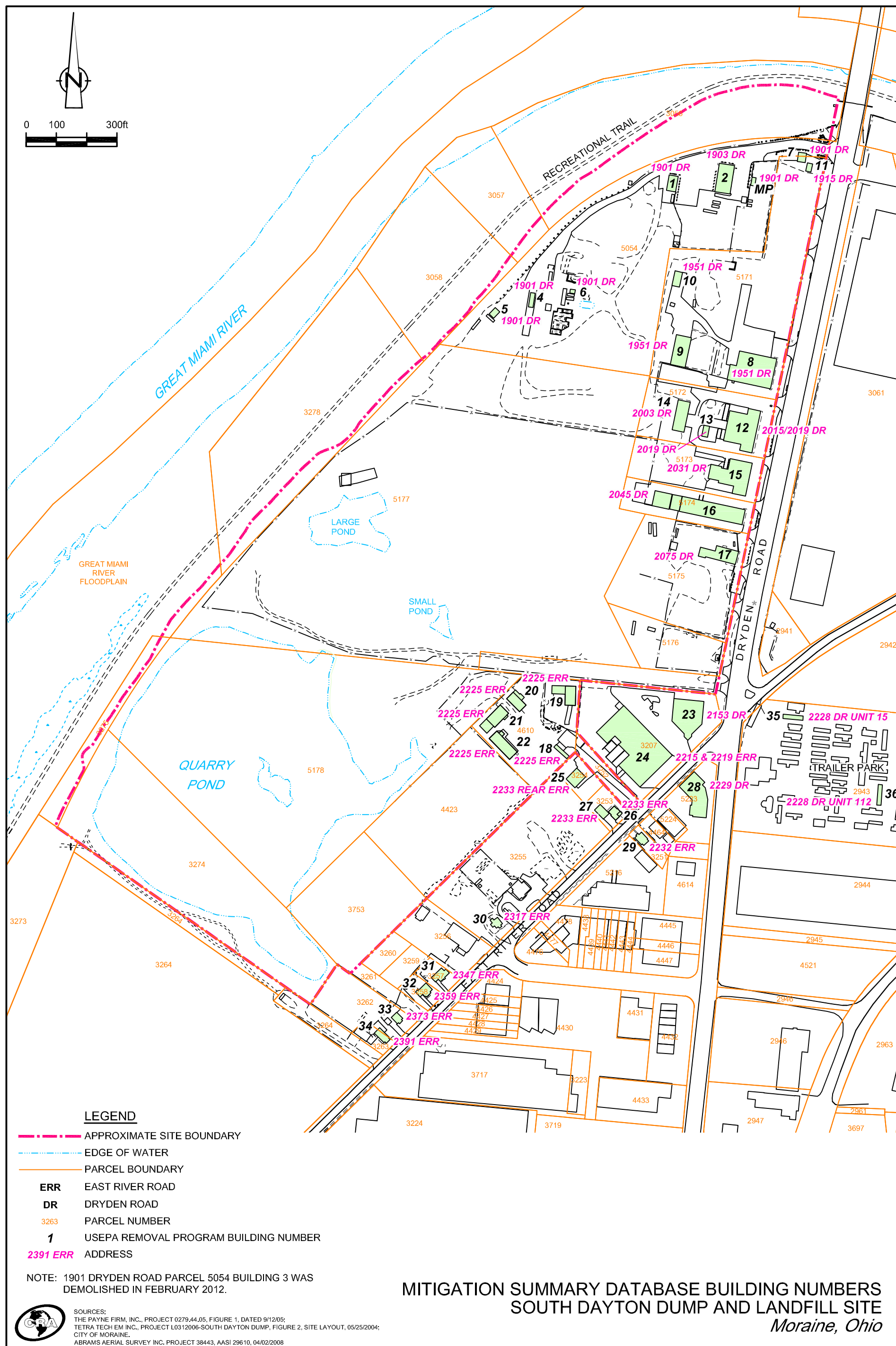
Steven L. Renninger
On-Scene Coordinator
EPA Region 5

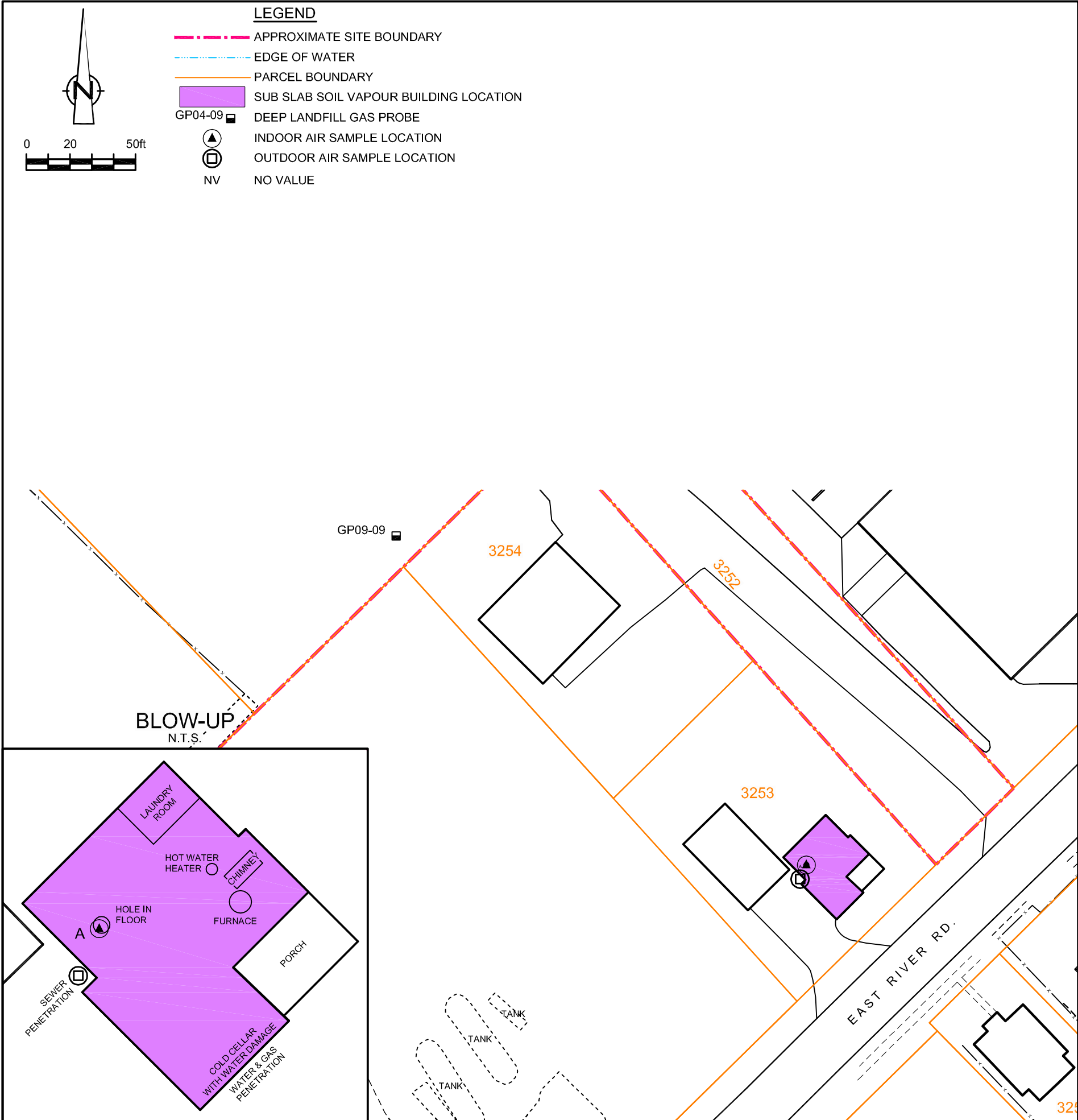
Attachments:

- A – Sample Location Map
- B – Validated Analytical Results

cc: Leslie Patterson - EPA Remedial Program Manager
Laura Marshall - Ohio EPA, Site Coordinator
Adam Loney, CRA
Site File

ATTACHMENT A
SAMPLE LOCATION MAP





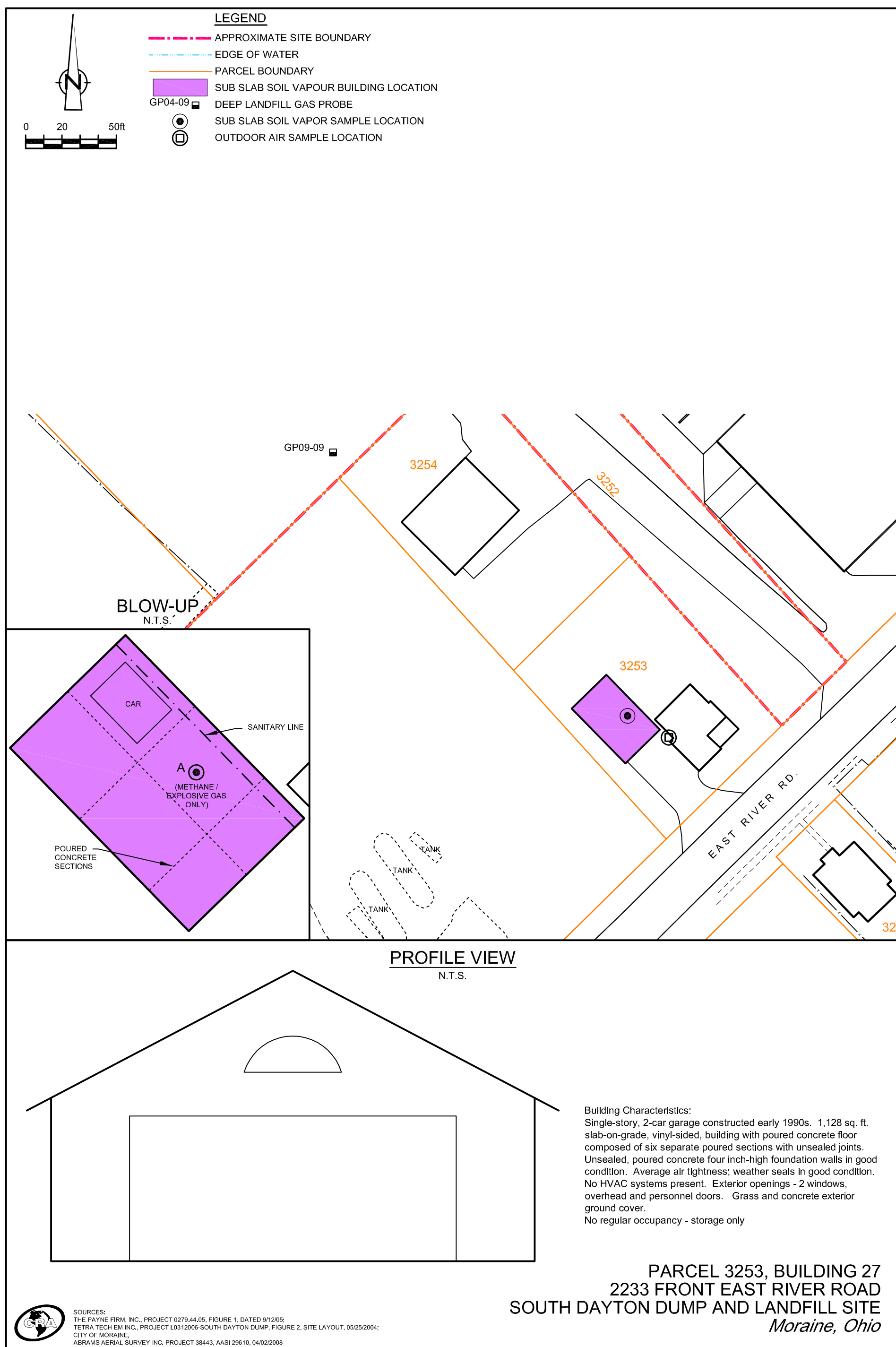
PROFILE VIEW
N.T.S.

Building Characteristics:
Two-story, residential, single family house constructed in 1800s with stone foundation and vinyl siding. Unfinished basement, 926 sq. ft. with concrete floor containing an approximately 2-ft. diameter hole with pipe for condensate. Unsealed, stone and mortar foundation walls in poor condition. Average air tightness, weather seals in fair condition. Heating provided by forced air natural gas furnace. Central A/C and fireplace present. Exterior openings in the basement - utility pipe penetrations, 2 windows and personnel doors. Constant occupancy by one adult.

PARCEL 3253, BUILDING 26
2233 FRONT EAST RIVER ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio



SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORaine,
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASJ 29610, 04/02/2008



ATTACHMENT B
VALIDATED ANALYTICAL RESULTS

TABLE 1

SUMMARY OF INDOOR AIR ANALYTICAL RESULTS
BUILDINGS 26 27 - 2233 EAST RIVER ROAD
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORaine, OHIO

<i>Sample Location:</i>				<i>Building 26</i>	<i>Building 26</i>	<i>Building 26, Outdoor Air</i>	<i>Building 26</i>	<i>Building 26</i>	<i>Building 26, Outdoor Air</i>	<i>Building 26</i>
<i>Sample Location:</i>				<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>
<i>Sample Date:</i>				<i>1/3/2012</i>	<i>1/3/2012</i>	<i>1/3/2012</i>	<i>7/31/2012</i>	<i>7/31/2012</i>	<i>7/31/2012</i>	<i>8/1/2012</i>
								<i>Duplicate</i>		
<i>Parameter</i>	<i>Units</i>	<i>ODH Indoor Air Screening Levels (Residential)</i>	<i>ODH Indoor Air Action Levels (Residential)</i>							
				<i>a</i>	<i>b</i>					
<i>Volatile Organic Compounds</i>										
1,1,1-Trichloroethane	ppb	NC	NC	0.035 U	0.010 J	0.035 U	0.030 U	0.037 UJ	0.030 U	-
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.040 U	-	0.040 U	0.061 U	0.076 UJ	0.061 U	-
1,1,2-Trichloroethane	ppb	NC	NC	0.019 U	0.0050 U	0.019 U	0.054 U	0.067 UJ	0.054 U	-
1,1-Dichloroethane	ppb	3.7	37	0.035 U	0.0025 U	0.035 U	0.026 U	0.032 UJ	0.026 U	-
1,1-Dichloroethene	ppb	NC	NC	0.030 U	0.0050 U	0.030 U	0.032 U	0.040 UJ	0.032 U	-
1,2,4-Trichlorobenzene	ppb	NC	NC	0.050 U	-	0.050 U	0.098 UJ	0.12 UJ	0.098 UJ	-
1,2,4-Trimethylbenzene	ppb	NC	NC	0.052 U	-	0.052 U	0.12 J	0.17 J	0.12 J	-
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.018 U	0.0040 U	0.018 U	0.044 U	0.055 UJ	0.044 U	-
1,2-Dichlorobenzene	ppb	NC	NC	0.048 U	-	0.048 U	0.070 U	0.087 UJ	0.070 U	-
1,2-Dichloroethane	ppb	NC	NC	0.031 U	0.019	0.031 U	0.047 U	0.058 UJ	0.047 U	-
1,2-Dichloroethene (total)	ppb	NC	NC	0.014 U	-	0.014 U	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.014 U	-	0.014 U	0.052 U	0.064 UJ	0.052 U	-
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	-	0.032 U	0.032 U	0.040 UJ	0.032 U	-
1,3,5-Trimethylbenzene	ppb	NC	NC	0.051 U	-	0.051 U	0.065 U	0.081 UJ	0.065 U	-
1,3-Butadiene	ppb	NC	NC	0.045 J	-	0.052 J	0.13 J	0.079 UJ	0.064 U	-
1,3-Dichlorobenzene	ppb	NC	NC	0.044 U	-	0.044 U	0.065 U	0.081 UJ	0.065 U	-
1,4-Dichlorobenzene	ppb	NC	NC	0.044 U	-	0.044 U	0.064 U	0.079 UJ	0.064 U	-
1,4-Dioxane	ppb	NC	NC	0.088 U	-	0.088 U	0.080 U	0.099 UJ	0.080 U	-
2,2,4-Trimethylpentane	ppb	NC	NC	0.036 U	-	0.036 U	0.065 J	0.091 J	0.077 J	-
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.57	-	0.37 J	1.1	1.0 J	0.68 J	-
2-Chlorotoluene	ppb	NC	NC	0.047 U	-	0.047 U	0.063 U	0.078 UJ	0.063 U	-
2-Hexanone	ppb	NC	NC	0.039 U	-	0.039 U	0.072 J	0.072 UJ	0.058 UJ	-
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.047 U	-	0.047 U	0.064 U	0.079 UJ	0.064 U	-
4-Ethyl toluene	ppb	NC	NC	0.046 U	-	0.046 U	0.066 U	0.082 UJ	0.066 U	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.026 U	-	0.026 U	0.093 J	0.056 UJ	0.045 U	-
Acetone	ppb	NC	NC	3.7 J	-	1.9 J	9.7 J	15 J	5.4 J	-
Allyl chloride	ppb	NC	NC	0.019 U	-	0.019 U	0.048 U	0.060 UJ	0.048 U	-
Benzene	ppb	0.4	4	0.21	0.27	0.24	0.50 ^a	0.49 J ^a	0.19 J	-
Benzyl chloride	ppb	NC	NC	0.046 U	-	0.046 U	0.078 U	0.097 UJ	0.078 U	-
Bromodichloromethane	ppb	NC	NC	0.028 U	-	0.028 U	0.044 U	0.055 UJ	0.044 U	-
Bromoform	ppb	NC	NC	0.019 U	-	0.019 U	0.048 U	0.060 UJ	0.048 U	-
Bromomethane (Methyl bromide)	ppb	NC	NC	0.012 U	-	0.012 U	0.032 U	0.040 UJ	0.032 U	-
Butane	ppb	NC	NC	0.98	-	0.67	7.0	7.6 J	1.1	-
Carbon disulfide	ppb	NC	NC	0.066 U	-	0.066 U	0.057 J	0.11 J	0.049 J	-
Carbon tetrachloride	ppb	NC	NC	0.064 J	-	0.073 J	0.10 J	0.14 J	0.094 J	-
Chlorobenzene	ppb	NC	NC	0.020 U	-	0.020 U	0.049 U	0.061 UJ	0.049 U	-
Chlorodifluoromethane	ppb	NC	NC	0.26 J	-	0.26 J	0.45 J	1.3 J	0.44	-
Chloroethane	ppb	NC	NC	0.016 U	-	0.016 U	0.035 U	0.043 UJ	0.035 U	-
Chloroform (Trichloromethane)	ppb	20	200	0.031 U	0.028	0.031 U	0.085 J	0.16 J	0.062 J	-
Chloromethane (Methyl chloride)	ppb	NC	NC	0.48 J	-	0.52	0.93	1.3 J	0.77	-
cis-1,2-Dichloroethene	ppb	8.8	88	0.014 U	0.0025 U	0.014 U	0.060 U	0.074 UJ	0.060 U	-
cis-1,3-Dichloropropene	ppb	NC	NC	0.016 U	-	0.016 U	0.074 U	0.092 UJ	0.074 U	-
Cyclohexane	ppb	NC	NC	0.039 U	-	0.040 J	0.074 J	0.12 J	0.040 U	-
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.048 U	-	0.048 U	0.057 U	0.071 UJ	0.057 U	-
Dibromochloromethane	ppb	NC	NC	0.021 U	-	0.021 U	0.042 U	0.052 UJ	0.042 U	-
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.46 J	-	0.51	0.63	0.87 J	0.64	-
Ethylbenzene	ppb	60	600	0.036 J	-	0.034 J	0.11 J	0.18 J	0.11 J	-
Hexachlorobutadiene	ppb	NC	NC	0.065 U	-	0.065 U	0.078 UJ	0.097 UJ	0.078 UJ	-
Hexane	ppb	NC	NC	0.096 J	-	0.081 J	0.34 J	7.2 J	0.26 J	-
Isopropyl alcohol	ppb	NC	NC	0.037 U	-	0.34 J	0.97 J	1.2 J	0.57 J	-
Isopropyl benzene	ppb	NC	NC	0.031 U	-	0.031 U	0.060 U	0.074 UJ	0.060 U	-
m&p-Xylenes	ppb	50	500	0.10 J	-	0.098 J	0.36	0.55 J	0.36	-

TABLE 1

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VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORaine, OHIO

<i>Sample Location:</i>				<i>Building 26</i>	<i>Building 26</i>	<i>Building 26, Outdoor Air</i>	<i>Building 26</i>	<i>Building 26</i>	<i>Building 26, Outdoor Air</i>	<i>Building 26</i>
<i>Sample Location:</i>				<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>
<i>Sample Date:</i>				<i>1/3/2012</i>	<i>1/3/2012</i>	<i>1/3/2012</i>	<i>7/31/2012</i>	<i>7/31/2012</i>	<i>7/31/2012</i>	<i>8/1/2012</i>
								<i>Duplicate</i>		
<i>Parameter</i>	<i>Units</i>	<i>ODH Indoor Air Screening Levels (Residential)</i>	<i>ODH Indoor Air Action Levels (Residential)</i>							
		<i>a</i>	<i>b</i>							
Methyl methacrylate	ppb	NC	NC	0.013 U	-	0.013 U	0.079 U	0.098 UJ	0.079 U	-
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.016 U	-	0.016 U	0.17 U	0.21 UJ	0.17 U	-
Methylene chloride	ppb	NC	NC	0.098 J	0.093 U	0.10 J	0.045 UJ	13 J	0.045 U	-
Naphthalene	ppb	0.7	NC	0.086 U	0.0070 U	0.086 U	0.090 U	0.11 UJ	0.090 U	-
N-Butylbenzene	ppb	NC	NC	0.055 U	-	0.055 U	0.046 U	0.057 UJ	0.046 U	-
N-Decane	ppb	NC	NC	-	-	-	0.79 J	0.55 J	0.29 J	-
N-Dodecane	ppb	NC	NC	-	-	-	0.078 U	0.097 UJ	0.099 J	-
N-Heptane	ppb	NC	NC	0.077 J	-	0.090 J	0.16 J	0.16 J	0.14 J	-
Nonane	ppb	NC	NC	-	-	-	0.42 J	0.40 J	0.14 J	-
N-Propylbenzene	ppb	NC	NC	0.050 U	-	0.050 U	0.056 U	0.069 UJ	0.056 U	-
N-Undecane	ppb	NC	NC	-	-	-	0.062 UJ	0.11 J	0.079 J	-
Octane	ppb	NC	NC	-	-	-	0.069 J	0.069 J	0.036 U	-
o-Xylene	ppb	50	500	0.041 J	-	0.038 J	0.16 J	0.20 J	0.13 J	-
Pentane	ppb	NC	NC	-	-	-	1.0	1.6 J	0.82 J	-
Styrene	ppb	NC	NC	0.030 U	-	0.030 U	0.079 J	0.089 J	0.058 U	-
tert-Butyl alcohol	ppb	NC	NC	0.071 U	-	0.071 U	0.23 J	0.21 J	0.077 J	-
tert-Butylbenzene	ppb	NC	NC	0.047 U	-	0.047 U	0.066 U	0.082 UJ	0.066 U	-
Tetrachloroethene	ppb	6	60	0.056 J	0.062	0.045 J	0.040 U	0.050 UJ	0.040 U	-
Tetrahydrofuran	ppb	NC	NC	0.018 U	-	0.018 U	0.063 U	0.19 J	0.063 U	-
Toluene	ppb	NC	NC	0.24	-	0.24	0.89 J	2.7 J	0.65	-
trans-1,2-Dichloroethene	ppb	NC	NC	0.032 U	0.0050 U	0.032 U	0.050 U	0.062 UJ	0.050 U	-
trans-1,3-Dichloropropene	ppb	NC	NC	0.020 U	-	0.020 U	0.048 U	0.060 UJ	0.048 U	-
Trichloroethene	ppb	0.4	4	0.030 U	0.013	0.030 U	0.036 U	0.045 UJ	0.036 U	-
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.21	-	0.21	0.39 J	2.2 J	0.30	-
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	0.071 J	-	0.074 J	0.083 J	0.11 J	0.077 J	-
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.019 U	-	0.019 U	0.035 U	0.043 UJ	0.035 U	-
Vinyl chloride	ppb	0.4	4	0.029 U	0.0034 J	0.029 U	0.071 U	0.088 UJ	0.071 U	-
Xylenes (total)	ppb	NC	NC	0.14 J	-	0.14 J	-	-	-	-
<i>Gases</i>										
Methane	%	0.05	0.05	-	-	-	0.21 U ^{ab}	0.20 U ^{ab}	0.21 U ^{ab}	-
<i>Field Parameter</i>										
Methane, field (unfiltered)	%	0.05	0.05	0.0	0.0	0.0	-	-	-	-
Methane, field (filtered)	%	0.05	0.05	-	-	-	0	0	0	0

Notes:

- J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tenatively identified compound is an approximate concentration
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
- - Not applicable.
 - Concentration was greater than applicable criteria.

TABLE 1

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BUILDINGS 26 27 - 2233 EAST RIVER ROAD
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORaine, OHIO

<i>Sample Location:</i>				<i>Building 26</i>	<i>Building 26, Outdoor Air</i>	<i>Building 26</i>	<i>Building 26</i>	<i>Building 26, Outdoor Air</i>	<i>Parcel 3253, Bldg 26</i>	<i>Building 27</i>	<i>Building 27</i>
<i>Sample Location:</i>				<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>	<i>2233 East River Road</i>
<i>Sample Date:</i>				<i>8/1/2012</i>	<i>8/1/2012</i>	<i>1/4/2012</i>	<i>1/4/2012</i>	<i>1/4/2012</i>	<i>1/9/2013</i>	<i>1/5/2012</i>	<i>7/30/2012</i>
				<i>Duplicate</i>							
<i>Parameter</i>	<i>Units</i>	<i>ODH Indoor Air Screening Levels (Residential)</i>	<i>ODH Indoor Air Action Levels (Residential)</i>								
		<i>a</i>	<i>b</i>								
<i>Volatile Organic Compounds</i>											
1,1,1-Trichloroethane	ppb	NC	NC	-	-	-	-	-	0.030 U	-	-
1,1,2,2-Tetrachloroethane	ppb	NC	NC	-	-	-	-	-	0.061 U	-	-
1,1,2-Trichloroethane	ppb	NC	NC	-	-	-	-	-	0.054 U	-	-
1,1-Dichloroethane	ppb	3.7	37	-	-	-	-	-	0.026 U	-	-
1,1-Dichloroethene	ppb	NC	NC	-	-	-	-	-	0.032 U	-	-
1,2,4-Trichlorobenzene	ppb	NC	NC	-	-	-	-	-	0.098 U	-	-
1,2,4-Trimethylbenzene	ppb	NC	NC	-	-	-	-	-	0.063 U	-	-
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	-	-	-	-	-	0.044 U	-	-
1,2-Dichlorobenzene	ppb	NC	NC	-	-	-	-	-	0.070 U	-	-
1,2-Dichloroethane	ppb	NC	NC	-	-	-	-	-	0.047 U	-	-
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	-	-	-	-	-	0.052 U	-	-
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	-	-	-	-	-	0.032 U	-	-
1,3,5-Trimethylbenzene	ppb	NC	NC	-	-	-	-	-	0.065 U	-	-
1,3-Butadiene	ppb	NC	NC	-	-	-	-	-	0.064 U	-	-
1,3-Dichlorobenzene	ppb	NC	NC	-	-	-	-	-	0.065 U	-	-
1,4-Dichlorobenzene	ppb	NC	NC	-	-	-	-	-	0.064 U	-	-
1,4-Dioxane	ppb	NC	NC	-	-	-	-	-	0.080 U	-	-
2,2,4-Trimethylpentane	ppb	NC	NC	-	-	-	-	-	0.11 J	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	-	-	-	-	-	0.24 J	-	-
2-Chlorotoluene	ppb	NC	NC	-	-	-	-	-	0.063 U	-	-
2-Hexanone	ppb	NC	NC	-	-	-	-	-	0.058 U	-	-
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	-	-	-	-	-	0.064 U	-	-
4-Ethyl toluene	ppb	NC	NC	-	-	-	-	-	0.066 U	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	-	-	-	-	-	0.045 U	-	-
Acetone	ppb	NC	NC	-	-	-	-	-	-	-	-
Allyl chloride	ppb	NC	NC	-	-	-	-	-	2.8 J	-	-
Benzene	ppb	0.4	4	-	-	-	-	-	0.048 U	-	-
Benzyl chloride	ppb	NC	NC	-	-	-	-	-	0.29	-	-
Bromodichloromethane	ppb	NC	NC	-	-	-	-	-	0.078 U	-	-
Bromoform	ppb	NC	NC	-	-	-	-	-	0.044 U	-	-
Bromomethane (Methyl bromide)	ppb	NC	NC	-	-	-	-	-	0.048 U	-	-
Butane	ppb	NC	NC	-	-	-	-	-	0.032 U	-	-
Carbon disulfide	ppb	NC	NC	-	-	-	-	-	5.5	-	-
Carbon tetrachloride	ppb	NC	NC	-	-	-	-	-	0.031 U	-	-
Chlorobenzene	ppb	NC	NC	-	-	-	-	-	0.060 J	-	-
Chlorodifluoromethane	ppb	NC	NC	-	-	-	-	-	0.049 U	-	-
Chloroethane	ppb	NC	NC	-	-	-	-	-	0.36	-	-
Chloroform (Trichloromethane)	ppb	20	200	-	-	-	-	-	0.035 U	-	-
Chloromethane (Methyl chloride)	ppb	NC	NC	-	-	-	-	-	0.038 U	-	-
cis-1,2-Dichloroethene	ppb	8.8	88	-	-	-	-	-	0.62	-	-
cis-1,3-Dichloropropene	ppb	NC	NC	-	-	-	-	-	0.060 U	-	-
Cyclohexane	ppb	NC	NC	-	-	-	-	-	0.074 U	-	-
Cymene (p-Isopropyltoluene)	ppb	NC	NC	-	-	-	-	-	0.12 J	-	-
Dibromochloromethane	ppb	NC	NC	-	-	-	-	-	0.057 U	-	-
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	-	-	-	-	-	0.042 U	-	-
Ethylbenzene	ppb	60	600	-	-	-	-	-	0.47	-	-
Hexachlorobutadiene	ppb	NC	NC	-	-	-	-	-	0.068 U	-	-
Hexane	ppb	NC	NC	-	-	-	-	-	0.078 U	-	-
Isopropyl alcohol	ppb	NC	NC	-	-	-	-	-	0.37 J	-	-
Isopropyl benzene	ppb	NC	NC	-	-	-	-	-	7.4	-	-
m&p-Xylenes	ppb	50	500	-	-	-	-	-	0.060 U	-	-

TABLE 1

SUMMARY OF INDOOR AIR ANALYTICAL RESULTS
BUILDINGS 26 27 - 2233 EAST RIVER ROAD
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORaine, OHIO

Sample Location:				Building 26	Building 26, Outdoor Air	Building 26	Building 26	Building 26, Outdoor Air	Parcel 3253, Bldg 26	Building 27	Building 27
Sample Location:				2233 East River Road	2233 East River Road	2233 East River Road	2233 East River Road	2233 East River Road	2233 East River Road	2233 East River Road	2233 East River Road
Sample Date:				8/1/2012	8/1/2012	1/4/2012	1/4/2012	1/4/2012	1/9/2013	1/5/2012	7/30/2012
				Duplicate							
Parameter	Units	ODH Indoor Air Screening Levels (Residential)	ODH Indoor Air Action Levels (Residential)								
		a	b								
Methyl methacrylate	ppb	NC	NC	-	-	-	-	-	0.14 J	-	-
Methyl tert butyl ether (MTBE)	ppb	NC	NC	-	-	-	-	-	0.079 U	-	-
Methylene chloride	ppb	NC	NC	-	-	-	-	-	0.17 U	-	-
Naphthalene	ppb	0.7	NC	-	-	-	-	-	0.28 J	-	-
N-Butylbenzene	ppb	NC	NC	-	-	-	-	-	0.090 U	-	-
N-Decane	ppb	NC	NC	-	-	-	-	-	0.046 U	-	-
N-Dodecane	ppb	NC	NC	-	-	-	-	-	-	-	-
N-Heptane	ppb	NC	NC	-	-	-	-	-	-	-	-
Nonane	ppb	NC	NC	-	-	-	-	-	0.16 J	-	-
N-Propylbenzene	ppb	NC	NC	-	-	-	-	-	-	-	-
N-Undecane	ppb	NC	NC	-	-	-	-	-	0.056 U	-	-
Octane	ppb	NC	NC	-	-	-	-	-	-	-	-
o-Xylene	ppb	50	500	-	-	-	-	-	-	-	-
Pentane	ppb	NC	NC	-	-	-	-	-	0.061 U	-	-
Styrene	ppb	NC	NC	-	-	-	-	-	-	-	-
tert-Butyl alcohol	ppb	NC	NC	-	-	-	-	-	0.058 U	-	-
tert-Butylbenzene	ppb	NC	NC	-	-	-	-	-	0.044 J	-	-
Tetrachloroethene	ppb	6	60	-	-	-	-	-	0.066 U	-	-
Tetrahydrofuran	ppb	NC	NC	-	-	-	-	-	0.048 J	-	-
Toluene	ppb	NC	NC	-	-	-	-	-	0.063 U	-	-
trans-1,2-Dichloroethene	ppb	NC	NC	-	-	-	-	-	0.51	-	-
trans-1,3-Dichloropropene	ppb	NC	NC	-	-	-	-	-	0.050 U	-	-
Trichloroethene	ppb	0.4	4	-	-	-	-	-	0.048 U	-	-
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	-	-	-	-	-	0.036 U	-	-
Trifluorotrichloroethane (Freon 113)	ppb	NC	NC	-	-	-	-	-	0.23	-	-
Vinyl bromide (Bromoethene)	ppb	NC	NC	-	-	-	-	-	0.056 J	-	-
Vinyl chloride	ppb	0.4	4	-	-	-	-	-	0.035 U	-	-
Xylenes (total)	ppb	NC	NC	-	-	-	-	-	0.071 UJ	-	-
									-		
Gases											
Methane	%	0.05	0.05	-	-	-	-	-	-	-	-
Field Parameter											
Methane, field (unfiltered)	%	0.05	0.05	-	-	0.0	0.0	0.0	0.0	0.0 /0.0	-
Methane, field (filtered)	%	0.05	0.05	0	0	-	-	-	0.0	-	0 /0

Notes:

- J - The chemical was detected by the laboratory, the listed value is an approximate concentration
JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
U - The chemical was not detected in the sample at the detection limit shown.
UJ - The chemical was not detected in the sample at the approximate detection limit shown.
NC - No criterion
-- Not applicable.
 Concentration was greater than applicable criteria.